In the Claims

The status of claims in the case is as follows:

1. [Currently amended] A method for executing full character interactive input/output mode communication at the application level of a TCP/IP protocol stack in a half duplex block mode environment requiring a half duplex block mode interface ~~, including~~ between a client workstation and a server, comprising the steps of:

operating said client to communicate in said application level over said half duplex block mode interface with a first server application written with half-duplex block mode architecture in half-duplex block mode;

operating said client to communicate over said half duplex block mode interface with a second server application requiring full duplex character interactive mode by:

receiving a key stroke into a buffer at said

client workstation;

automatically transferring said keystroke from said client workstation over ~~a 1/2~~ a half duplex block mode interface to a full duplex character interactive input/output server application; and

said full duplex character interactive input/output server application processing said keystroke and responding appropriate to context of said full duplex character interactive server application;

thereby transferring single key strokes as they are entered at said client workstation even though operating in said half duplex block mode environment in which character sequences are normally transferred.

2. [Original] The method of claim 1, said buffer being an auto enter, non-display entity on a display screen.

3. [Previously presented] The method of claim 1, said buffer being a non-screen entity accessible to said client workstation.

4. [Currently amended] A method for character interactive input/output in a half duplex block mode environment including a client workstation and a server, comprising the steps of:

connecting said client workstation ~~to said~~ a first server application written to half-duplex block mode architecture;

operating said client to communicate a half duplex block mode interface said first server application in half-duplex block mode;

connecting said client workstation to a second server application written to full duplex character interactive mode architecture;

operating said client to communicate over said half duplex block mode interface with said second server application in full duplex character interactive mode by:

defining a workstation display at said client

workstation as a 1-byte character input field that has auto-enter and non-displayable attributes operating in said half duplex block mode;

receiving a keystroke into said input field;

automatically transferring said keystroke from said workstation display to a server application; and

said server application processing said keystroke and responding appropriate to context of said server application;

thereby transferring single key strokes as they are entered at said client workstation even though operating in said half duplex block mode environment in which character sequences are normally transferred.

5. [Previously presented] The method of claim 4, further comprising the steps of:

communicating an attention signal from said client

workstation; and

responsive to said attention signal, communicating said keystroke from said workstation display to said server application.

6. [Currently amended] The method of claim 4, said client workstation and server together ~~becoming~~ forming a cascaded client to a targeted application server that requires character dependent input/output in full duplex mode.

7. [Previously presented] The method of claim 4, further comprising the step preventing display of said input character on said workstation display.

8. [Previously presented] The method of claim 4, further comprising the step of operating said client workstation and providing for translation of said character from EBCDIC to ASCII.

9. [Currently amended] A method for character interactive input/output in a half duplex block mode environment, comprising the steps of:

connecting a client to a first server application written to half-duplex block mode architecture;

operating said client to communicate over a half duplex block mode interface to said first server application in half-duplex block mode;

connecting said client to a second server application written to full duplex character interactive mode architecture;

operating said client to communicate over said half duplex block mode interface with said second server application in full duplex character interactive mode by:

configuring a workstation display device at a client workstation to a one character field; and

immediately upon entry of an input character into said one character field, processing said input character by signaling an attention identifier from a client emulator application, and responsive to said attention identifier, retrieving said

input character from said one character field;

thereby transferring single key strokes as they are entered at said one character field even though operating in said half duplex block mode environment in which character sequences are normally transferred.

10. [Previously presented] The method of claim 9, further comprising the step of translating and communicating said input character to a remote server and application for interpretation within the context of said remote application.

11. [Currently amended] The method of claim 10, further comprising the step of returning from said remote application to said client workstation a display character for display at said workstation display device.

12. [Previously presented] The method of claim 11, said display character selectively comprising an echo character which may be said input character.

13. [Currently amended] A method for operating a client application in character interactive input/output mode in a

half duplex block mode environment, comprising the steps of:

connecting said client application to a first server application written to half-duplex block mode architecture;

operating said client application to communicate over a half duplex block mode interface to said first server application in half-duplex block mode;

connecting said client application to a second server application written to full duplex character interactive mode architecture;

operating said client application to communicate over said half duplex block mode interface with said second server application in full duplex character interactive mode by:

responsive to receiving an attention command from a keyboard, retrieving from a one character display buffer configured as an auto-entry non-displayable display a single input character; and

translating and communicating said input character to a remote application for interpretation within the context of said remote application;

thereby transferring single key strokes as they are entered at said keyboard even though operating in said half duplex block mode environment in which character sequences are normally transferred.

14. [Currently amended] A method for operating a display operating in a half duplex block mode environment, comprising the steps of:

connecting a client application to a first server application written to half-duplex block mode architecture;

operating said client application to communicate over a half duplex block mode interface to said first server application in half-duplex block mode;

connecting said client application to a second server

application written to full duplex character interactive mode architecture;

operating said client application to communicate over said half duplex block mode interface with said second server application in full duplex character interactive mode by:

configuring said display with respect to a character entry device as a one character, auto-entry, non- displayable buffer;

responsive to entry of an input character into said one character, auto-entry, non-displayable buffer, immediately communicating said input character to a remote application for interpretation;

thereby transferring single key strokes as they are entered at said one character, auto-entry, non-displayable buffer even though operating in said half duplex block mode environment in which character sequences are normally transferred.

15. [Previously presented] The method of claim 14, further comprising the steps of:

receiving from said remote application an echo character selectively not said input character; and

displaying said echo character.

16. [Currently amended] A system for performing character interactive input/output in a half duplex block mode environment including a client workstation and a server, comprising:

said client workstation including a client application selectively connected to a first server application written to half-duplex block mode architecture and to a second server application written to full duplex character interactive mode architecture;

said client application for communicating over a half duplex block mode interface to said first server application in half-duplex block mode;

said client application for communicating over said

half duplex block mode interface with a second server application in full duplex character interactive input/output mode including:

a display buffer for receiving a key stroke;

~~a client for~~ said client application automatically transferring said key stroke from said workstation ~~over a~~ over said half duplex block mode interface ~~to a full duplex character interactive input/output~~ said second server application;

said ~~full duplex character interactive~~ second server application for processing said keystroke and responding appropriate to context of said server application;

thereby transferring single key strokes as they are entered at said client workstation even though operating in said half duplex block mode environment in which character sequences are normally transferred.

17. [Currently amended] A system including a workstation

and a server for character interactive input/output in a half duplex block mode environment, comprising:

a network for connecting said workstation to said server;

said workstation including a client application;

a first server application written to half-duplex block mode architecture;

said client application for communicating over a half duplex block mode interface to said first server application in half-duplex block mode;

a second server application written to full duplex character interactive mode architecture;

said client application for communicating over said half duplex block mode interface with said second server application in full duplex character interactive mode including:

a workstation display configured as a 1-byte

character input field that has auto-enter and non-displayable attributes;

a keyboard for entering a keystroke into said input field;

said workstation automatically transferring each said keystroke from said workstation display to a server application; and

said server application for processing said keystroke and responding to said workstation with an echo character appropriate to context of said server application for display at said workstation display;

thereby transferring single key strokes as they are entered at said workstation even though operating in said half duplex block mode environment in which character sequences are normally transferred.

18. [Currently amended] A system for character interactive input/output in a half duplex block mode environment,

comprising:

a first server application written to half-duplex block mode architecture;

a client application for communicating over a half duplex block mode interface to said first server application in half-duplex block mode;

a second server application written to full duplex character interactive mode architecture;

said client application for communicating over said half duplex block mode interface with said second server application in full duplex character interactive mode including:

a workstation display device configured as a one character field;

~~a server; and~~

a client emulator application responsive immediately upon entry of an input character into

said one character field, for retrieving and communicating to said server over said half duplex block mode interface said input character from said one character field, and responsive to said server for displaying at said display device an echo character selectively different from said input character;

thereby transferring single input characters as they are entered at said one character field even though operating in said half duplex block mode environment in which character sequences are normally transferred.

19. [Currently amended] A display for character interactive input/output in a half duplex block mode environment in which client applications at a client workstation selectively communicates with a first server application over a half duplex block mode interface in half duplex block mode and with a second server application in via said half duplex block mode interface in full duplex character interactive mode, said client workstation, comprising:

a one character, auto-entry, non-displayable buffer for

receiving from an input device an input character for communication to a server application; and

an output field for displaying an echo character from said server application;

thereby transferring single key strokes as they are entered at said input device even though operating in said half duplex block mode environment in which character sequences are normally transferred.

20. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for character interactive input/output in a half duplex block mode environment including a workstation and a server, said method steps comprising:

operating said workstation to communicate a half duplex block mode interface with a first server application written with half-duplex block mode architecture in half-duplex block mode;

operating said workstation to communicate over said

half duplex block mode interface with a second server application requiring full duplex character interactive mode by:

receiving a key stroke into a buffer at said workstation;

automatically transferring said key stroke from said workstation to a server application;

said server application processing said keystroke and responding appropriate to context of said server application;

thereby transferring single key strokes as they are entered at said buffer even though operating in said half duplex block mode environment in which character sequences are normally transferred.

21. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for character interactive input/output in a half duplex block

mode environment including a workstation and a server, said method steps comprising:

connecting said client workstation to said server over a half duplex block mode interface;

communicating with said server over said half duplex block mode interface selectively according to half duplex block mode and full duplex character interactive input/output mode;

when communicating with said server in said full duplex character interactive input/output mode,

defining a workstation display as a 1-byte character input field that has auto-enter and non-displayable attributes;

receiving a keystroke into said input field;

automatically transferring said keystroke from said workstation display to a server application;

said server application processing said keystroke

and responding appropriate to context of said server application;

thereby transferring single key strokes as they are entered at said client workstation even though operating in said half duplex block mode environment in which character sequences are normally transferred.

22. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for character interactive input/output in a half duplex block mode environment, said method steps comprising the steps of:

operating a client to communicate over a half duplex block mode interface with a first server application written with half-duplex block mode architecture in half-duplex block mode;

operating said client to communicate over said half duplex block mode interface with a second server application requiring full duplex character interactive mode by:

configuring a workstation display device to a one character field; and

immediately upon entry of an input character into said one character field, processing said input character by signaling an attention identifier to a client emulator application, and responsive to said attention identifier, retrieving said input character from said one character field;

thereby transferring single input characters as they are entered at said one character field even though operating in said half duplex block mode environment in which character sequences are normally transferred.

23. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for operating a client application in character interactive input/output mode in a half duplex block mode environment, said method steps comprising the steps of:

operating said client application to communicate over a half duplex block mode interface with a first server application written with half-duplex block mode architecture in half-duplex block mode;

operating said client to communicate over said half duplex block mode interface with a second server application requiring full duplex character interactive mode by:

responsive to receiving an attention command from a keyboard, retrieving from a one character display buffer configured as an auto-entry non-displayable display a single input character; and

translating an communicating said input character to a remote application for interpretation within the context of said remote application;

thereby transferring single key strokes as they are entered at said keyboard even though operating in said half duplex block mode environment in which character sequences are normally

transferred.

24. [Currently amended] A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for operating a display in a half duplex block mode environment selectively in half duplex block mode and in full duplex character interactive input/output mode using an application layer half duplex block mode interface, when communicating in said full duplex character interactive input/output mode said method steps comprising the steps of:

configuring said display with respect to a character entry device as a one character, auto-entry, non-displayable buffer;

responsive to entry of an input character into said one character, auto-entry, non-displayable buffer, immediately communicating said input character to a remote application for interpretation;

thereby transferring single characters as they are entered at said character entry device even though operating in said half duplex block mode environment in

which character sequences are normally transferred.

25. [Currently amended] A computer program product ~~or computer program element~~ for operating a display in a half duplex block mode environment selectively to communicate in half duplex block mode and full duplex character interactive mode according to method steps executed in full duplex character interactive mode comprising the steps of:

configuring said display with respect to a character entry device as a one character, auto-entry, non-displayable buffer; and

responsive to entry of an input character into ~~said on~~ said one character, auto-entry, non-displayable buffer, immediately communicating said input character to a remote application via an application layer half duplex block mode interface for interpretation;

thereby transferring single characters as they are entered at said character entry device even though operating in said half duplex block mode environment in which character sequences are normally transferred.

26. [Previously presented] The method of claim 1, said automatically transferring step further comprising the steps of:

transferring said key stroke from said client workstation to a Telnet client and thence to said full duplex character interactive (I/O) server application via a Unix server.

27. [Previously presented] The method of claim 4, said automatically transferring step further comprising the steps of:

transferring said key stroke from said client workstation to a Telnet client and thence to said server application via a Unix server.

28. [Canceled]